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(71) Applicant (for all designated States except US): **THOMSON LICENSING S.A.** [FR/FR]; 46, Quai A. Le Gallo, F-92648 Boulogne Cedex (FR).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **WEBER, Rudolf** [CH/CH]; Bergstr. 56, CH-8706 Meilen (CH).

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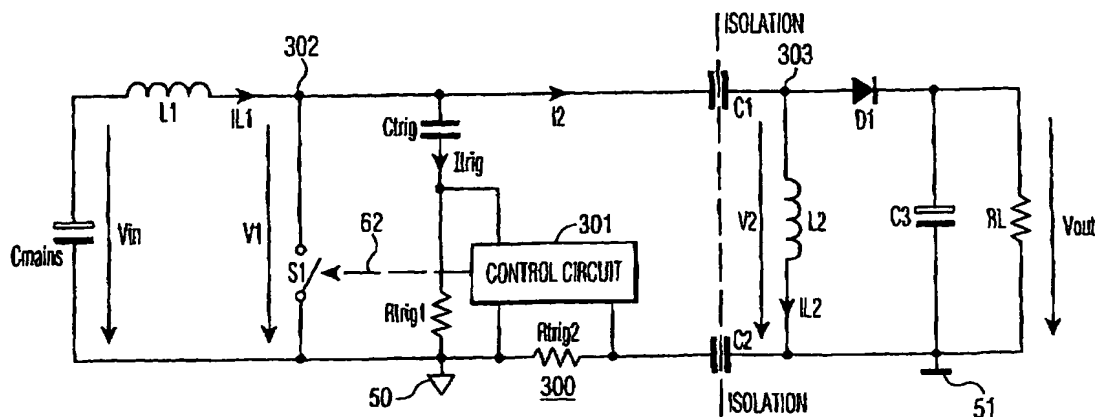
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(54) Title: CAPACITIVELY COUPLED POWER SUPPLY



(57) Abstract: A power supply includes a supply inductor and a first capacitor coupled to form a resonant circuit to generate a resonant waveform in a resonant operation, during a first portion of an operation cycle of the power supply. A charge storage element develops an output voltage to energize a load. A rectifier is coupled to the charge storage element and to the resonant circuit and is responsive to the resonant waveform for applying the output voltage back to the resonant circuit to interrupt the resonant operation, at an end time of the operation cycle first portion, when the resonant waveform produces a first change of state in the rectifier. A first sensor senses when the first change of state in the rectifier occurs. A source of a supply current is coupled to the rectifier and rectified in the rectifier to produce a rectified current that is coupled to the charge storage element to replenish a charge therein, during a second portion of the operation cycle. A switching transistor is responsive to an output signal of the first sensor for enabling the supply current to be coupled to the rectifier, during the operation cycle second portion, and for disabling the supply current from being coupled to the rectifier, during the operation cycle first portion.

## INTERNATIONAL SEARCH REPORT

Application No  
PCT/IB 03/05523A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 H02M3/00

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H02M

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 696 841 A (HEWLETT PACKARD CO) 14 February 1996 (1996-02-14) column 1, line 34 -column 2, line 27; figure 2	1-11
X	US 6 144 565 A (LETHELLIER PATRICE R) 7 November 2000 (2000-11-07) column 3; figure 4	1-11
A	LLOYD DIXON: "High Power factor preregulator Using the Sepic Converter" UNITRODE POWER SUPPLY DESIGN SEMINAR TOPICS, 'Online! 1993, XP002277199 Retrieved from the Internet: <URL:http://focus.ti.com/lit/ml/slup103/sl up103.pdf> 'retrieved on 2004-04-19! page 6; figures 1,5	1

☐ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

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Date of the actual completion of the international search

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European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Imbernon, L

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US 6144565	A	07-11-2000	NONE	

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